CLAIMS

1. An appliance for a network based security system, comprising:
    a. a sensor component adapted for generating a signal in response to a condition present at the sensor component;
    b. a processor for generating a digital output signal corresponding to the sensor component signal;
    c. a network interface for transmitting the digital output signal via a digital network.

2. The appliance of claim 1, wherein the network is a hardwired network and the network interface is a connector.

3. The appliance of claim 2, wherein the connector is an RJ-45 jack.

4. The appliance of claim 1, wherein the network is a wireless network and the network interface is a wireless transmitter.

5. The appliance of claim 4, wherein the network interface also includes a wireless receiver.

6. The appliance of claim 1, further including an address signal for identifying the type and location of the appliance.

7. The appliance of claim 6, wherein the location signal is a gps signal.

8. The appliance of claim 2, wherein the network interface includes an embedded base-T hub.

9. The appliance of claim 1, wherein the network interface includes a wireless receiver and a hard-wired connector.

10. The appliance of claim 1, wherein the sensor component includes a plurality of distinct sensor sub-components and wherein the processor combines the plurality

of sensor signals into a single digital signal having sub-components representing each of the plurality of sensor signals.

11. The appliance of claim 1, wherein the network includes a controlled system and wherein the sensor signal is a control signal for controlling the controlled system.

12. The appliance of claim 1, wherein the sensor is a video sensor and the signal comprises a video signal, the appliance further comprising:
    a. an analog-to-digital converter for converting the analog video signal to a digital signal;
    b. a motion video buffer;
    c. an mpeg compressor associated with the motion video compressor;
    d. a still frame buffer;
    e. a jpeg compressor associated with the still frame buffer;
    f. a multiplexer for combining the outputs of the mpeg compressor and the jpeg compressor for generating a combined output signal to the processor for distribution via the network interface over the network.

13. The appliance of claim 12, wherein there is further comprising:
    a. an audio sensor component;
    b. an analog-to-digital converter for converting the analog audio signal to a digital signal;
    c. an audio compressor associated with the audio sensor component for introducing a signal to the multiplexer, whereby the multiplexer produces a combined digital signal comprising a video and an audio component for distribution via the network interface over the network.

14. The appliance of claim 5, wherein the wireless transmitter and the wireless receiver further comprises a transmitter/receiver selection switch for switching between outgoing sensor signals and incoming control signals.

15. The appliance of claim 5, wherein the wireless network interface is a radio frequency system.

16. The appliance of claim 5, further including a self-contained power supply.

17. The appliance of claim 1, wherein, the network interface comprises a conventional LAN data link including:
    a. a hub physical-layer interface;
    b. two twisted-pairs wires;
    c. a first transformer connecting the two twisted wires to hub;
    d. a network device physical-layer interface connected to the twisted pairs; and
    e. a second transformer connected to a peripheral device.

18. The appliance of claim 17, further including a regulator connected to the twisted pairs side of the second transformer.

19. The appliance of claim 17, further including a power supply connected to the twisted pairs side of the first transformer.

20. The appliance of claim 1, wherein the sensor component is a motion detector.

21. The appliance of claim 1, wherein the sensor component is a smoke detector.

22. The appliance of claim 1, wherein the sensor component is a temperature detector.

23. The appliance of claim 1, wherein the sensor component is a combination smoke and temperature detector.

24. The appliance of claim 1, wherein the sensor component is adapted for generating a signal when manually actuated.

25. The appliance of claim 1, wherein the sensor component is contact switch.

26. The appliance of claim 1, wherein the sensor component is a heat sensor.

27. The appliance of claim 1, wherein the sensor component is glass breakage sensor.

28. The appliance of claim 1, wherein the sensor component includes a signal-generating unit for generating a local warning signal.

29. The appliance of claim 28, wherein the signal-generating unit is a siren.

30. The appliance of claim 28, wherein the signal-generating unit is a strobe light.

31. The appliance of claim 1, wherein the sensor component is a thermostat.

32. The appliance of claim 1, wherein the sensor component is a humidistat.

33. The appliance of claim 1, wherein the sensor component is combination thermostat/humidistat.

34. The appliance of claim 1, wherein the sensor component comprises a programmable module for sending a control signal to a remote device.

35. The appliance of claim 34, wherein the programmable module is a keypad.

36. The appliance of claim 34, wherein the programmable module is a control manually operable control switch.

37. The appliance of claim 36, wherein the control switch is an ON-OFF switch.

38. The appliance of clam 36, wherein the control switch is a variable switch.

39. The appliance of claim 28, wherein the signal generator unit is an indicator display.

40. The appliance of claim 28, wherein the signal generator unit is a loud speaker.

41. The appliance of claim 2, wherein the network interface includes both an RJ-45 jack and an RJ-11 jack.

42. The appliance of claim 28, wherein the signal generator unit is a clock.

43. The appliance of claim 1, wherein the sensor component is a magnetic strip reader.

44. The appliance of claim 1, wherein the sensor component is a proximity card reader.

45. The appliance of claim 1, further including a time display over the IP network.

46. The appliance of claim 1, further including emergency event annunciation over the IP Network.

47. The appliance of claim 1, further including room paging over the IP Network.

48. The appliance of claim 1, further including room audio monitoring over the IP network.

49. The appliance of claim 1, further including room intercom over the IP Network.

50. The appliance of claim 1, further including room temperature sensing over the IP network.

51. The appliance of claim 1, further including room gunshot detection o\ver the IP network.

52. The appliance of claim 1, further including room access control over the IP network.

53. The appliance of claim 1, further including muted camera and microphone in a room for privacy.

54. The appliance of claim 1, further including an open camera and microphone when a panic button is activated.

55. The appliance of claim 1, further including an intercom button on the panic button.

56. The appliance of claim 1 further including an emergency button on the panic button.

57. The appliance of claim 1, wherein the panic button is configured to initiate specific actions in response to activation.

58. The appliance of claim 57, wherein the panic button is configured to activate intercom functions to and from a room over the IP network.

59. The appliance of claim 57, wherein the panic button is configured to activate logging of all intercom calls.

60. The appliance of claim 57, wherein the panic button is configured to activate emergency notification.

61. The appliance of claim 57, wherein the panic button is configured to activate a flashing location Icon on the map.

62. The appliance of claim 57, wherein the panic button is configured to activate the recording of all emergency audio/video on server or appliance.

63. The appliance of claim 1, further comprising a workstation-to-workstation Intercom.

64. The appliance of claim 1, the appliance further configured to provide calls patched into POTS telephone calls from the "outside" through a gateway.

65. The appliance of claim 1, the appliance further configured to provide calls on internal PBX through a gateway.

66. The appliance of claim 1, the appliance further configured to provide calls patched into VOIP telephone calls.

67. The appliance of claim 1, the appliance further configure to provide access control.

68. The appliance of claim 67, the access control including access or access denied flashing on a map.

69. The appliance of claim 67, the access control including an automatic camera switching based on an access attempt.

70. The appliance of claim 67, wherein the access appliance includes encryption.